

purposes of further prosecution thereof in a Division.

Applicant does not traverse the restriction.

### **LISTING OF CLAIMS**

Claims 1-12 (drawn to a division)

Claim 13 (currently amended): A light emitting diode having a plated substrate with a mirror, comprising:  
a permanent metal substrate;  
a mirror formed on said permanent metal substrate;  
an LED epitaxial structure formed on said mirror, and sequentially comprising a second cladding layer, an active layer, a first cladding layer, a window and a metal contact layer, wherein said second cladding layer is partially exposed;  
a first electrode formed on said metal contact layer; and  
a second electrode formed on said exposed second cladding layer;  
a mirror formed beneath said LED epitaxial structure; and  
a permanent metal substrate plated beneath said mirror.

Claim 14 (original): The light emitting diode as claimed in claim 13, wherein said LED epitaxial structure is made from a material selected from the group consisting of  $\text{Ga}_x\text{Al}_y\text{In}_{1-x-y}\text{N}$ ,  $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$ ,  $\text{In}_x\text{Ga}_{1-x}\text{As}$ ,  $\text{ZnS}_x\text{Se}_{1-x}$ ; wherein  $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ .

Claim 15 (original): The light emitting diode as claimed in claim 13 further comprising a transparent conductive film between said first electrode and said metal contact layer.

Claim 16 (canceled)

Claim 17 (canceled)

Claim 18 (original): The light emitting diode as claimed in claim 13, wherein said mirror is made from a composite of a metal with a low refractivity and an insulating layer with a high refractivity, and said insulating layer is adjacent to said LED epitaxial structure.

Claim 19 (original): The light emitting diode as claimed in claim 18, wherein said composite is selected from the group consisting of Al/Al<sub>2</sub>O<sub>3</sub>, Al/SiO<sub>2</sub>, Al/MgF<sub>2</sub>, Pt/Al<sub>2</sub>O<sub>3</sub>, Pt/SiO<sub>2</sub>, Pt/MgF<sub>2</sub>, Al/Al<sub>2</sub>O<sub>3</sub>, Al/SiO<sub>2</sub>, Al/MgF<sub>2</sub>, Au/Al<sub>2</sub>O<sub>3</sub>, Au/SiO<sub>2</sub>, Au/MgF<sub>2</sub>, Ag/Al<sub>2</sub>O<sub>3</sub>, Ag/SiO<sub>2</sub>, Ag/MgF<sub>2</sub>.

Claim 20 (currently added): The light emitting diode as claimed in claim 14, wherein said LED epitaxial structure is made from (Al<sub>x</sub>Ga<sub>1-x</sub>)<sub>y</sub>In<sub>1-y</sub>P; wherein 0 ≤ x ≤ 1, 0 ≤ y ≤ 1; and said mirror is made from a material selected from the group consisting of Ag, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni and Zn, or mixtures thereof.

Claim 21 (currently added): The light emitting diode as claimed in claim 13, wherein said LED epitaxial structure is made from Ga<sub>x</sub>Al<sub>y</sub>In<sub>1-x-y</sub>N; wherein 0 ≤ x ≤ 1, 0 ≤ y ≤ 1; and said mirror is made from a material selected from the group consisting of Ag, Pt, Pd, Al, and Ni, or mixtures thereof.

Claim 22 (currently added): The light emitting diode as claimed in claim 13, wherein said LED epitaxial structure is made from In<sub>x</sub>Ga<sub>1-x</sub>As; wherein 0 ≤ x ≤ 1, 0 ≤ y ≤ 1; and said mirror is made from a material selected from the group consisting of Ag, Au, Au/Zn, Au/Be, Au/Ge, Au/Ge/Ni and Zn, or mixtures thereof.

Claim 23 (currently added): The light emitting diode as claimed in claim 13, wherein said LED epitaxial structure is made from ZnS<sub>x</sub>Se<sub>1-x</sub>; wherein